

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A circuit arrangement for protecting an integrated semiconductor circuit comprising:

a protection circuit located between an element to be protected and a reference potential, the protection circuit comprising a thyristor structure that includes active elements; and

a control circuit configured to drive the protection circuit by generating a plurality of control signals to drive one or more active elements of the protection circuit, the control circuit comprising:

a detector circuit in parallel with the protection circuit;

a first resistive-capacitive (RC) element, the first RC element comprising a resistor and a capacitor;

an additional circuit arranged downstream from the detector circuit;

a driver circuit that couples the additional circuit to the thyristor; and

a second RC element comprising a second resistor and a second capacitor, the second RC element being electrically connected to a connecting point between the additional circuit and the driver circuit.

2-3. (Canceled)

4. (Currently Amended) The circuit arrangement of claim [[21]] 1, wherein the switching elements comprise inverters.

5. (Previously Presented) The circuit arrangement of claim 1, wherein the active elements comprise active elements of different conductivity types and the plurality of control signals comprise a plurality of control signals for the active elements of different conductivity types, the control signals having opposite polarities that are based on conductivity types of active elements, the control signals being configured to drive control inputs of the active elements.

6. (Currently Amended) The circuit arrangement of claim [[2]]1, wherein the detector circuit of the control circuit is configured to identify a signal with a predetermined rise time at the element to be protected.

7. (Previously Presented) The circuit arrangement of claim 1, wherein the control circuit comprises a plurality of time-dependent elements configured to determine a duration of activation of the control circuit.

8. (Previously Presented) The circuit arrangement of claim 7, wherein the time-dependent elements comprise resistive-capacitive (RC) elements.

9. (Currently Amended) The circuit arrangement of claim [[21]] 1, wherein the detector circuit and the switching elements each comprise individual transistors.

10. (Currently Amended) The circuit arrangement of claim [[2]] 1, wherein the detector circuit is configured to identify a signal with a predetermined rise time at the element to be protected, the predetermined rise time being a detection criterion of the detector circuit.

11. (Previously Presented) The circuit arrangement of claim 10, wherein the control circuit comprises at least some time-dependent elements configured to determine a duration of activation of the control circuit.

12. (Previously Presented) The circuit arrangement of claim 10, wherein the detector circuit comprises at least one resistive-capacitive (RC) element, the at least one RC element comprising a resistor and a capacitor.

13. (Canceled)

14. (Currently Amended) The circuit arrangement of claim [[13]] 1, wherein the detector circuit comprises two detector subcircuits, each of the detector subcircuits configured to drive a switching element for the active elements of the protection circuit.

15. (Currently Amended) The circuit arrangement of claim [[21]] 1, wherein the switching elements comprise individual metal oxide semiconductor (MOS) transistors.

16. (Previously Presented) The circuit arrangement of claim 1, further comprising switching elements and driver elements, the switching elements being electrically connected to the driver elements.

17. (Previously Presented) The circuit arrangement of claim 1, wherein control inputs of the active elements of the protection circuit comprise a semiconductor structure that includes wells of different conductivity types, the wells including highly doped regions for output circuits of the active elements.

18. (Currently Amended) A method for protecting an integrated semiconductor circuit, the method comprising:

detecting a state of an element to be protected using a protection circuit located between the element to be protected and a reference potential, the protection circuit comprising a thyristor structure that includes active elements;

using a control circuit to generate a plurality of control signals based on a detected state of the element to be protected, the control circuit comprising:

a detector circuit configured to identify a transient pulse;

a first resistive-capacitive element;  
a second resistive-capacitive element configured to determine how long the  
control circuit remains active; and  
communicating the control signals to a control input of the active elements of the  
protection circuit.

19. (Previously Presented) The circuit arrangement of claim 8, wherein the RC elements are configured to generate control signals for controlling a beginning of activation and an end of activation of the control circuit.

20. (Previously Presented) The circuit arrangement of claim 9, wherein the switching elements each comprise individual bipolar transistors.

21. (Currently Amended) The circuit arrangement of claim [[2]], wherein upon detection of a detection criterion, the control circuit is configured to drive switching elements that are configured to generate the control signals.

22. (New) A circuit arrangement for protecting an integrated semiconductor circuit comprising:

a protection circuit located between an element to be protected and a reference potential, the protection circuit comprising a thyristor structure that includes active elements, the thyristor structure being represented by a first and a second bipolar transistor; and

a control circuit configured to drive the protection circuit by generating a plurality of control signals to drive one or more active elements of the protection circuit, the control circuit comprising a detector circuit in parallel with the protection circuit; wherein the detector circuit comprises:

a first subcircuit comprising:

a first resistive-capacitive element comprising a first capacitor and a first resistor; and

a first detector transistor connected downstream from the first resistive-capacitive element; and

a second subcircuit comprising:

a second resistive-capacitive element comprising a second capacitor and a second resistor; and

a second detector transistor electrically connected downstream from the second resistive-capacitive element; and

wherein the first subcircuit is configured to drive the first detector transistor and the second subcircuit is configured to drive the second detector transistor.

23. (New) The circuit arrangement of claim 1, wherein the additional circuit comprises one element from a group comprising an inverter and a transistor, and the driver circuit comprises one element from a group comprising an inverter and a transistor.